

Claims

1. A method for detecting the complete stop of a vehicle, the complete stop being detected as a function of the vehicle's speed or of the speed of at least one of the vehicle's wheels, characterized in that the complete-stop detection is also carried out as a function of one quantity (P_a) representing the braking force when the vehicle is braked.
2. The method according to Claim 1, characterized in that the complete-stop detection is also carried out as a function of at least two speed thresholds, a first speed threshold (v_1) and a second speed threshold (v_2).
3. The method according to Claim 2, characterized in that the second speed threshold (v_2) essentially corresponds to the speed below which the vehicle's speed can no longer be measured using the measuring method implemented in the vehicle.
4. The method according to Claim 2 or 3, characterized in that the second speed threshold (v_2) is between 1.5 km/h and 3.0 km/h.
5. The method according to Claim 2, 3, or 4, characterized in that the first speed threshold (v_1) is established as a function of the vehicle's driving situation.
6. The method according to Claim 2, 3, 4, or 5, characterized in that the first speed threshold (v_1) is selected in such a way that the vehicle's engine is uncoupled.

7. The method according to one of Claims 2 through 6, characterized in that the first speed threshold (v_1) is between 3.0 km/h and 6.0 km/h, preferably between 4.0 km/h and 5.0 km/h.
8. The method according to Claims 2 through 7, characterized in that an average deceleration value (a) is generated from the difference between the first speed threshold (v_1) and the second speed threshold (v_2), as well as from the time period ($t_2 - t_1$) in which the vehicle's speed (v) has a value between the first speed threshold (v_1) and the second speed threshold (v_2) during braking.
9. The method according to Claim 8, characterized in that a characteristic curve between vehicle deceleration (a) and quantity (p_B) representing the braking force is selected as a function of the average deceleration value (a) and average value (p_B) of the quantity representing the braking force during the time period ($t_2 - t_1$) in which the vehicle's speed (v) has a value between first speed threshold (v_1) and second speed threshold (v_2) during braking.
10. The method according to Claim 9, characterized in that while the vehicle is traveling at a speed (v) below the second speed threshold (v_2), the instantaneous vehicle deceleration ($a_H + \beta p_B$, βp_B) is determined from the quantity (p_n) representing the braking force using the selected characteristic curve, and in that at least one of the quantities, complete-stop instant of the vehicle and complete-stop location of the vehicle, is determined using instantaneous deceleration ($a_H + \beta p_B$, βp_B).

11. The method according to one of the preceding claims, in particular when the vehicle has a hydraulic brake, characterized in that braking pressure (p_B) of the brake, of a hydraulic brake in particular, is the quantity representing the braking force.
12. The method according to Claim 11, characterized in that the characteristic curve between vehicle deceleration (a_f) and the braking pressure (P_B) for a braking pressure (p_B) up to 20 bar, in particular up to 10 bar, is selected so that the inclination of the roadway on which the vehicle is braking is an arbitrary parameter of a family of characteristics between vehicle deceleration (a_f) and braking pressure (P_B).
13. The method according to Claim 11 or 12, characterized in that for a braking pressure (p_B) above 10 bar, in particular above 20 bar, the characteristic curve between vehicle deceleration (a_f) and braking pressure (p_B) is selected in such a way that the vehicle's mass is an arbitrary parameter of a family of characteristics between vehicle deceleration (a_f) and braking pressure (p_B).
14. The method according to one of Claims 8 through 13, characterized in that at least one of the values
 - vehicle acceleration conditional upon the inclination of the roadway on which the vehicle is braking; and
 - mass of the vehicleis determined as a function of the average deceleration value (a) and of the value of the quantity (p_B)

representing the braking force for the time period in which the vehicle's speed has a value between first speed threshold (v_1) and second speed threshold (v_2) during braking.

15. The method according to Claim 14, characterized in that starting the vehicle after a complete stop occurs as a function of at least one of the values
 - vehicle acceleration conditional upon the inclination of the roadway on which the vehicle is braking; and
 - mass of the vehicle.
16. A device (5, 32, 47) for detecting the complete stop of a vehicle as a function of the vehicle's speed in accordance with one of the preceding claims, characterized in that the device (5, 32, 47) for detecting a complete stop detects the complete stop of a vehicle as a function of the vehicle's speed or of the speed of at least one of the vehicle's wheels and as a function of a quantity (p_b), which represents the braking force when the vehicle is braked.